

AMENDMENTS TO THE DRAWINGS:

The attached sheet of drawings includes changes to Figure 2. This sheet, which includes Figure 2, replaces the original sheet including Figure 2.

In Figure 2, a reference number and leader line is added for references 30 and 31.

Attachment: Replacement Sheet(s)

REMARKS

The application has been amended and is believed to be in condition for allowance.

Claims 1-22 remain in this application.

Claims 1-22 are amended to address antecedent basis issues, and further amended in consideration of U.S. practice and preferences.

Claim 1 is also amended to recite wall components standing on a sill, the wall components forming a cavity within the wall components and extending from the sill, and that a heat source is provided entirely within the sill on which the external wall components stand. The amendment finds support in the specification, the drawing figures (e.g., page 2, lines 5-7; page 4, final paragraph; page 6, first paragraph; page 8, last full paragraph; Figures 1-2c) and the claims as originally filed.

The amendments to the claims do not introduce new matter.

Figure 2 is amended to include reference numbers and corresponding leader lines for references 30 and 31, as described in page 2, second full paragraph of the specification. The amendment to Figure 2 does not introduce new matter.

Formal Objections

The Official Action objected to claims 13 and 14, stating that claim 13 appears to be a dependent claim but does not recite which claim it is dependent from, and claim 14 is consequently objected to for depending from claim 13.

In reply, claim 13 has been amended to depend from claim 1. Withdrawal of the claim objection is respectfully solicited.

Formal Rejections, Section 112, second paragraph

The Official Action rejected claims 1-22 under 35 USC 112, second paragraph, stating that the term "optionally" in independent claim 1 renders the claim indefinite.

In reply, claim 1 is amended to obviate the Official Action's rejection. Withdrawal of the rejection for indefiniteness is respectfully solicited.

Substantive Matters, Section 103

The Official Action rejected claims 1-6, 10-11, and 13 under 35 USC 103(a) as being unpatentable over Jandl (PCT Publication WO 02/22975; "JANDL") in view of Masuki et al. (US 5,156,208; "MASUKI").

The Official Action rejected claims 7, 8, and 16-22 under 35 USC 103(a) as being unpatentable over JANDL and MASUKI and further in view of Fiedrich (US 6,330,980; "FIEDRICH").

The Official Action rejected claim 9 under 35 USC 103(a) as being unpatentable over JANDL, MASUKI, and FIEDRICH, and further in view of Sokolean (US 5,799,723; "SOKOLEAN").

The Official Action rejected claims 12, 14, and 15 under 35 USC 103(a) as being unpatentable over JANDL, MASUKI, FIEDRICH and further in view of Kesting (US 4,856,239; "KESTING").

The rejections are respectfully traversed for at least the reasons that follow.

It is firstly noted that claim 1 is amended, as stated above. It is respectfully submitted that neither JANDL nor MASUKI, individually or in combination, teach or suggest wall components, connected to roof components and comprised of panels forming a cavity extending from a sill, and that a heat source is provided entirely within the sill on which the external wall components stand, as required by amended claim 1.

The Official Action offers JANDL as teaching a building composed of outside wall components and roof components, and MASUKI as teaching a panel with a means for supplying heat. The Official Action states that MASUKI teaches a heating means is located in the lower area of the outside wall component. The Official Action proposes combining the heating means of MASUKI with the building of JANDL in order to provide the building with a means for insulation and a means for heating and cooling the building.

In reply, it is respectfully submitted that MASUKI does not teach or suggest a heat source for supplying heat into a cavity formed by the panels of external wall components standing on a sill, and further, MASUKI does not teach or suggest the heat source being provided entirely within the sill, as require by amended claim 1.

On the contrary, MASUKI discloses a heat pipe unit for air conditioning and heating comprising one or more self-contained box panels with coolant fluid enclosed therein to provide cooling at the head level and warming at the feet (column 1, lines 6-11; column 1, lines 46-53; column 7, lines 35-36). Each box panel contains a cavity, separate from the cavity of any other box panels. Heating is provided by vaporizing the fluid 22 such as Freon, alcohol and water through a heat-transfer pipe 16, then condensing the vapor due to radiation from the surface of the panel body 13 (column 3, lines 26-27; column 4, lines 28-35; Figure 1). A room is thus heated by heat transfer from the panel body.

The Official Action proposes incorporating this enclosed heating panel (30 of Figure 1, or 45 of Figure 8) as the heating means in the lower area of an outside wall component. However, neither LANDL nor MASUKI, individually or in combination, teach or suggest a heat source provided entirely within a sill on which external wall components stand, as required by claim 1. Connecting pipes, for example, are

necessary which feed and discharge heat transfer pipes in the lower panel body (column 4, lines 4-16). There is no suggestion that the heating panel 30, 45 and supporting apparatus could be adapted to fit inside such a space, or be effective in heating a wall cavity; MASUKI, at best, teaches a panel as being exposed in a room, not behind a wall (column 2, lines 4-6).

At best, MASUKI teaches a heating panel, wherein a heating or cooling component is located at a bottom of the heating panel. For example, MASUKI teaches a lower panel body 13, shaped like a box-container and charged with coolant 22 (Freon, alcohol, etc.) with a lower heat-transfer pipe 16 extending in a lower space of the body (column 3, lines 53-56). This disclosure fails to teach or suggest any of a sill, external wall components, or roof components directed toward a building; the structure taught by MASUKI as surrounding the lower heat-transfer pipe 16 is directed solely to a self-contained panel of placement in a room.

Further, the heat transfer mechanism taught by MASUKI requires the thermodynamic action of the coolant within the enclosed panel body 13 (column 4, lines 28-35). A combination of solely the heat-transfer pipe 16 of MASUKI with the building structure of LANDL would thus fail to operate, as LANDL teaches nothing to support the condensation and recycling of coolant fluid as performed by the panel body 13 taught by MASUKI. In other words, MASUKI does not teach anything suggesting that the

heat-transfer pipe 16 would be effective as a heat source if not contained within the panel body 13.

Hence, the combination of MASUKI with LANDL not only fails to teach or suggest all of the features recited in claim 1, the combination would be detrimental to the intended purpose of the instant invention (heating wall cavities of a building so as to insulate the building formed by the walls; see the last paragraph of specification page 1).

As the combination of LANDL and MASUKI does not teach or suggest the recited features of the invention, and is further not able to work with a similar function, it is respectfully submitted that the proposed combination of JANDL with MASUKI fails to render the invention recited in amended claim 1 obvious.

It is further respectfully submitted that claims depending from claim 1 are patentable over the cited references at least for depending from a patentable claim.

Reconsideration and allowance of the claims are respectfully requested.

From the foregoing, it will be apparent that Applicant has fully responded to the September 26, 2008 Official Action and that the claims as presented are patentable. In view of this, Applicant respectfully requests reconsideration of the claims, as presented, and their early passage to issue.

In order to expedite the prosecution of this case, it is requested that the Examiner telephone the attorney for

Applicant at the number set forth below if the Examiner is of the opinion that further discussion of this case would be helpful.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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**APPENDIX:**

The Appendix includes the following item(s):

- ☐ - a terminal disclaimer
- ☐ - a 37 CFR 1.132 Declaration
- ☐ - a new or amended Abstract of the Disclosure
- ☒ - a Replacement Sheet for Figure 2 of the drawings
- ☐ - a Substitute Specification and a marked-up copy of the originally-filed specification
- ☐ - a verified English translation of foreign priority document